

ABSTRACT

A digital delay locked loop (DLL) includes a phase detector that measures the phase difference between a signal to be synchronized and a reference signal. The phase detector produces an increase or decrease signal in response to the phase difference between the two
5 signals. This signal is received by a binary counter, which changes its count in response. The output of the binary counter is supplied to a comparator logic that implements a thermometer coding scheme. Each of the comparator output signals enables or disables a corresponding transistor stack in a delay line, thereby changing the delay of the signal propagating through the delay line.

TOP SECRET